Title: VISIBLY DISTINGUISHING PORTIONS OF COMPOUND

WORDS

Inventor(s): Bruce Karsh, et al.

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GIVEN A PLURALITY OF COMPOUND WORDS IN A PLURALITY OF RESOURCES, DETERMINE ONE OR MORE STEM WORDS THAT ARE ASSOCIATED WITH EACH SUCH COMPOUND WORD



104

INDEX THE RESOURCES BY THE STEM WORDS THAT ARE ASSOCIATED WITH THE COMPOUND WORDS WITHIN THOSE RESOURCES



106
RECEIVE A COMPONENT WORD AS USER INPUT



SELECT, FROM AMONG THE PLURALITY OF RESOURCES, ONE OR MORE RESOURCES THAT ARE INDEXED BY THE COMPONENT WORD



110

SELECT, FROM AMONG THE SELECTED RESOURCES, ONE OR MORE PORTIONS THAT CONTAIN A COMPOUND WORD THAT IS ASSOCIATED WITH A STEM WORD THAT MATCHES THE COMPONENT WORD



112

DISPLAY THE SELECTED PORTIONS WITH FORMS OF THE COMPONENT WORD VISIBLY DISTINGUISHED FROM THE REMAINDERS OF THE COMPOUND WORDS

FIG. 1

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DETERMINE TWO OR MORE STEM WORDS THAT ARE ASSOCIATED WITH A COMPOUND WORD



204

FOR EACH STEM WORD, DETERMINE A STARTING POSITION ASSOCIATED WITH THAT STEM WORD



206

FOR EACH STEM WORD EXCEPT FOR THE LAST STEM WORD, DETERMINE AN ENDING POSITION ASSOCIATED WITH THAT STEM WORD BASED ON THE STARTING POSITION ASSOCIATED WITH THE NEXT STEM WORD



208

RECEIVE DATA THAT SPECIFIES A WORD THAT IS ASSOCIATED WITH A PARTICULAR ONE OF THE STEM WORDS



210

IN RESPONSE TO RECEIVING THE DATA, DISPLAY THE COMPOUND WORD WITH THE LETTERS AT AND BETWEEN THE STARTING AND ENDING POSITIONS ASSOCIATED WITH THE PARTICULAR STEM WORD VISIBLY DISTINGUISHED FROM THE REMAINDER OF THE COMPOUND WORD

FIG. 2

Title: VISIBLY DISTINGUISHING PORTIONS OF COMPOUND WORDS Inventor(s): Bruce Karsh, et al. Express Mail No.: EV322192756US Date: September 24, 2003 Sheet 3 of 8 Docket No. 50269-0562 **→**300 304 SELECT A NEXT DELTA A FROM A SEQUENCE OF DELTAS 306 SET THE CURRENT POSITION P TO BE EQUAL TO THE HINT POSITION P' PLUS THE SELECTED DELTA 4 308 BASED ON A COMPARISON OF LETTERS IN A STEM WORD WITH LETTERS STARTING AT THE CURRENT POSITION P IN A COMPOUND WORD, CALCULATE A SCORE FOR THE SELECTED DELTA \(\triangle \) 310 NO IS THE SCORE FOR THE SELECTED DELTA arDelta HIGHER THAN A HIGH SCORE H? YES 312 SET THE HIGH SCORE H TO BE THE SCORE FOR THE SELECTED DELTA Δ 314 STORE THE SELECTED DELTA \varDelta AS THE BEST DELTA THUS FAR 316 YES ARE THERE ANY MORE DELTAS IN THE SEQUENCE OF DELTAS?

OF DELTAS ▼ NO TO

FIG. 3A

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Title: VISIBLY DISTINGUISHING PORTIONS OF COMPOUND **WORDS** Inventor(s): Bruce Karsh, et al. Date: September 24, 2003 Express Mail No.: EV322192756US Docket No. 50269-0562 Sheet 4 of 8 FROM 316 **-**300 318 SET THE CURRENT POSITION P TO BE EQUAL TO THE HINT POSITION P' PLUS THE BEST DELTA 320 NO DOES THE STEM WORD START WITH A CONSONANT? **▼**YES 322 ASSOCIATE THE STEM WORD WITH THE CURRENT POSITION P AS THE STARTING POSITION ASSOCIATED WITH THE STEM WORD 324 SET THE HINT POSITION P' TO BE EQUAL TO THE POSITION IN THE STEM WORD OF THE LAST CONSONANT THAT MATCHED A LETTER IN THE COMPOUND WORD 326 BASED ON A COMPARISON OF VOWELS THAT OCCUR BEFORE THE FIRST

CONSONANT IN THE STEM WORD WITH VOWELS THAT OCCUR BEFORE THE CURRENT POSITION P IN THE COMPOUND WORD, DETERMINE THE POSITION VIN THE COMPOUND WORD OF A VOWEL THAT MATCHES THE FIRST LETTER IN THE STEM WORD

328

ASSOCIATE THE STEM WORD WITH THE POSITION $\it V$ AS THE STARTING POSITION ASSOCIATED WITH THE STEM WORD

FIG. 3B

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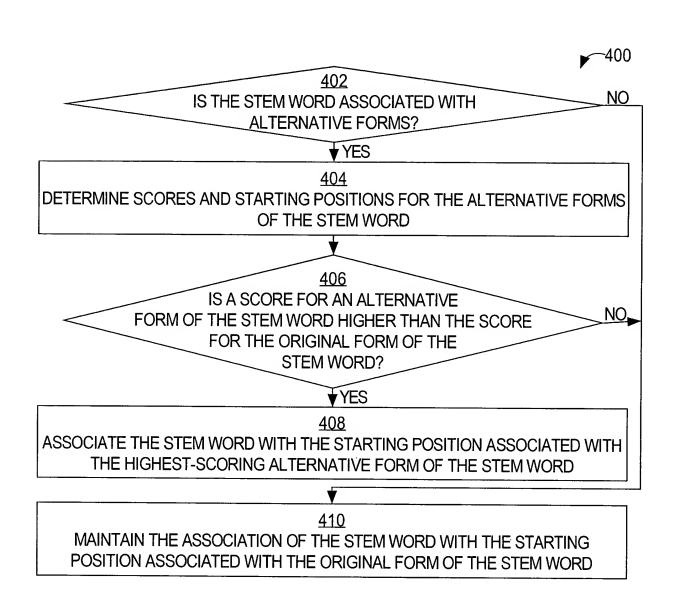


FIG. 4

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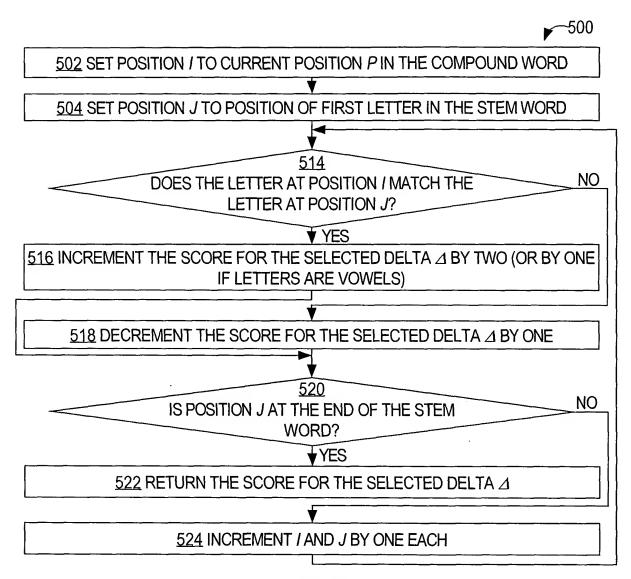


FIG. 5

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602 SET POSITION V TO THE POSITION BEFORE THE CURRENT POSITION P IN THE COMPOUND WORD 604 SET POSITION W TO THE POSITION BEFORE THE FIRST CONSONANT IN THE STEM WORD 606 NO IS POSITION W BEFORE THE FIRST LETTER OF THE STEM WORD? **▼**YES 608 INCREMENT V BY ONE 610 ASSOCIATE THE STEM WORD WITH THE POSITION V AS THE STARTING POSITION ASSOCIATED WITH THE STEM WORD 612 DOES THE LETTER AT POSITION V MATCH THE NO LETTER AT POSITION W? **▼**YES 614 DECREMENT V AND W BY ONE EACH 616 DOES THE LETTER BEFORE POSITION V MATCH THE NO LETTER AT POSITION W? **▼**YES 618 DECREMENT V BY TWO AND DECREMENT W BY ONE 620 NO DOES THE LETTER AT POSITION V MATCH THE LETTER BEFORE POSITION W? **▼YES** 622 DECREMENT V BY ONE AND DECREMENT W BY TWO

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